Digital Muslim Review

Article

Inquiring Arabic-Islamic Debatable Terms to ChatGPT

Will It Take a Side?

Digital Muslim Review
Vol. 1 No. 1, June 2023
Pages : 18-35
DOI : 10.32678/dmr.v1i1.2
© : author(s)

Received : 13/04/2023
Revised : 06/07/2023
Accepted : 22/08/2023

Muhammad Lukman Arifianto
Arabic Department, Faculty of Letters, Universitas Negeri Malang, Indonesia
muhammad.arifianto.fs@um.ac.id

Titis Thoriquttyas
Institute for Social Sciences, Department of Philosophy and Religious Studies
Faculty of Theology, Marmara University, Turkey

Iqbal Fathi Izzudin
Arabic Department, Faculty of Letters, Universitas Negeri Malang, Indonesia

Abstract

In this paper, we argue that, as a powerful artificial intelligence (AI) language model, ChatGPT can provide sufficient responses to questions regarding controversial Arabic–Islamic terms. Therefore, this study aims to examine the responses generated by ChatGPT regarding these terms, which are often debated by the community. By relying on a combination of content and sentiment analysis, we analysed ChatGPT's response through the specific prompts submitted. The result shows that ChatGPT can provide sufficient and promising explanations regarding two concepts still debatable today, *jihad* and bid'ah. Furthermore, based on our test, the explanations generated from this AI language model are relatively balanced and moderate because they present multiple answers. In its conclusion part of each response, ChatGPT always warns that these terms described are labeled "complex" and "controversial," meaning there is no sentiment in favor of one particular view. This research implies that ChatGPT – in this context, a free version - can help us answer various questions or at least provide an understanding at the conceptual level, even though it is related to debatable matters.

Keywords: Arabic-Islamic terms; sentiment; ChatGPT; Artificial Intelligence; digital Muslims

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Introduction

Muslim society is currently facilitated by the latest technological developments that support their daily lives (Bunt, 2018; Campbell & Evolvi, 2020). For example, social media can share or follow various accounts that distribute information and knowledge about Islam and the Muslim world (Rusli & Nurdin, 2022; Solahudin & Fakhruroji, 2019). Furthermore, search engines can be used to search for various information, references, and literature that we need immediately. Each of these technologies was developed using algorithms and artificial intelligence principles.

Regarding technological developments, one that has been addressed as phenomenal in the past five years is the emergence of ChatGPT applications. ChatGPT is phenomenal because it is one of the few artificial intelligence technologies capable of conversing with humans naturally and flexibly (Lund & Wang, 2023; Shahriar & Hayawi, 2023). GPT-3.5, the architecture behind ChatGPT, is trained using an extensive and diverse deep learning model, enabling it to understand human language and produce meaningful natural texts (Abdullah et al., 2022; Bahrini et al., 2023).

Surprisingly, these tools can be used for various purposes, from personal assistance to text analysis and generating text-based content (Malinka et al., 2023). ChatGPT's roots can be traced back to the inception of the desire to create a highly efficient and versatile AI language model capable of assisting in various tasks, including text generation, translation, and data analysis. This revolutionary framework paved the way for developing formidable language models like OpenAI's GPT series, including predecessors like GPT-2 and GPT-3, ultimately laying the foundation for ChatGPT (Ray, 2023). This makes ChatGPT invaluable for companies and individuals seeking to leverage the power of artificial intelligence to increase efficiency and productivity. Finally, ChatGPT's popularity is fueled by its unique ability to contextually understand language and produce text that looks like a natural person wrote. ChatGPT is helpful in various applications, including language translation, chatbot building, and sentiment analysis (Bahrini et al., 2023; Dwivedi et al., 2023). Although it can be used for almost all purposes, human considerations are still needed to determine the validity of the information generated (Kitamura, 2023).

The development of science and technology, on the one hand, has a positive impact, which can improve the quality of human life (Oztemel & Gursev, 2020; Sima et al., 2020). Various modern means of industry, communication, and transportation have proven useful. However, on the other hand, it is not uncommon for technology to have a negative impact because it harms human life and dignity.

In the Islamic religious context, the mass utilisation of the Internet and AI has resulted in conflicts among Muslims and other religions in more expansive areas. For instance, Luqiu and Yang (2020) have proved that social media could become a prominent medium to spread anti-Muslim sentiments online. They noted that the conflicts between anti-Muslimism and Muslims resulted in a debate caused by negative posts about Islam from anti-Muslimism. These posts then trigger Muslims to stand for their faith by replying to and

explaining the truth of their faith. This occurrence has reinforced the statement that negative comments that could be shared seamlessly via social media might trigger an internet debate between people or, even worse, which could lead to conflict between communities in the real world.

Similar conflicts have occurred among Muslim communities. Several argued that terms such as *jihad*, *bid'ah*, or caliphate tend to trigger conflicts and fierce debates because many Islamic group affiliations understand these terms differently (Hanafi et al., 2022). One member of this Islamic affiliation could articulate a negative opinion about another Islamic group affiliation's understanding regarding these terms and trigger a fierce debate among them. Thus, this phenomenon was aggravated by numerous Islamic radical groups applying these terms to achieve their politics and goals (Moniruzzaman, 2008). In summary, the relationship between religion and technology is complex and varies depending on the context and beliefs. While some religious communities may view technology as threatening traditional values, others have embraced it as a tool for spreading messages and building communities (Bunt, 2018; Collins & Halverson, 2018).

In the context of a digital society, most Muslims are currently using technology (the Internet) to browse various sources of information or even to find various solutions related to the religious problems they experience. In this case, ChatGPT can also be used to ask questions regarding these issues. Thus, this prolific utilisation brought inevitable potencies to trigger subsequent debates and conflicts among Muslims since it can be used to gather information that reinforces their notions or to disarrange other people's beliefs.

Therefore, this study aimed to examine the responses raised by ChatGPT regarding Arabic-Islamic terms, which are still often debated by the community. Because this artificial intelligence technology model can respond to various questions, observing the content and sentiment generated from this AI response becomes an exciting approach. By relying on a combination of content and sentiment analysis, we try to analyse ChatGPT's response through the specific prompts submitted. Moreover, serving the content and sentiment generated from this AI response becomes exciting because perpetual debates among Muslims can be minimised by knowing and investigating these terms wisely.

Research on ChatGPT

From the day it was released, ChatGPT has drawn researchers' attention because it can interact conversationally (Dwivedi et al., 2023; Ray, 2023; Shahriar & Hayawi, 2023). This leads to answering follow-up questions, admitting mistakes, challenging incorrect premises, rejecting inappropriate requests, and gathering and summarising information. Hence, ChatGPT has been utilised in numerous contexts and subjects, including healthcare, social issues, and education. Despite these abilities, however, many researchers have skepticised the information provided by ChatGPT and attempted to investigate its appropriateness. Oviedo-Trespalacios et al. (2023) investigated ChatGPT capabilities to provide

appropriate information about common safety-related topics such as distraction, fatigue, and burnout. They concluded that while ChatGPT could provide appropriate information in general, it could only provide simplified information with a lack of cited sources. Therefore, they suggested not utilising ChatGPT as an information source for complex and complicated topics.

Moreover, this skepticism motivated many researchers to investigate how ChatGPT responds to numerous questions of applied subjects, especially in health care subjects, since it critically impacts people's lives. Sallam (2023) conducted a systematic review utilising the ChatGPT in healthcare contexts. From several articles examined, ChatGPT lacked reliability for the information provided. Thus, this inaccurate information might be generated with potentially serious medical consequences if taken mindlessly. Therefore, he added that to avoid the utilisation of ChatGPT in the healthcare context without expert supervision.

In the social context, Chen et al. (2022) investigated how ChatGPT responds to different subpopulations on crucial science, social, and debatable issues, such as climate change and Black Lives Matter (BLM) movements. This study divided participants into two categories: majority and minority groups. One substantive result of this study was that ChatGPT could vary its responses according to different users. However, ChatGPT added more citations from external links and scientific research and used more negative sentiment words when responding to questions from the minority group (who had a negative opinion about climate change). Thus, ChatGPT can also possess the capacity to influence users. Minority groups tend to change their opinions regarding social issues after their conversation with ChatGPT. In conclusion, they added that the way ChatGPT can change its responses depending on user preferences with varying deliberative styles and sentiments offers vital implications for studying equity in dialogue systems.

Contingent to the above research, research on ChatGPT utilisation in a religious context is yet to be conducted. In particular, Islamic debatable terms could trigger a conflict among religions. Although ChatGPT does not provide reliable information, it can influence users through its responses. Since it is crucial to prevent users from misappropriating ChatGPT in religious contexts and triggering ridiculous conflicts, this study aimed to fill this gap and provide proper results on how ChatGPT responds to various questions about debatable terms in Islam.

Arabic-Islamic Religious Term Misconception

Regarding misconceptions about Arabic-Islamic religious terms, two studies discuss this: (Hanafi et al., 2022) and (Arifianto et al., 2021). Both discussed debatable terms in Islamic religions. Hanafi et al. (2022) investigated the students' perspectives on several Islamic religious terms that come from Arabic, regarding *jihad*, caliphate, and *bid'ah*, (Arifianto et al., 2021) revisited the *bid'ah hasanah* term in the public and academic spheres.

These two studies highlight the debate on the meaning of several terms in the Islamic religion, which are still multi-interpretative, and how to respond. In line with the two studies above, this study will examine several Islamic terms widely known in Arabic (i.e. *jihad* and *bid'ah*). We choose the two terms since those were terms that frequently became the center of debate among moslems around the world (Hanafi et al, 2022)

Furthermore, the research results of Hanafi et al. (2022) showed that students shared their opinions, convictions, and assessments regarding the misuse of some Islamic terms and how they were connected to acts of violence, the establishment of the caliphate, and charges of bid' ah against different groups. Examining student comments (on the shared questionnaire) demonstrated that the description of radical Muslim organisations frequently impacted students' understanding of terminology. These results imply that radical organisations can affect pupils' understanding of a term and foster unfavorable feelings. Meanwhile, Arifianto et al. (2021) concluded that the term *bid'ah hasanah* is still being debated by some religious groups, mainly the Salafis and the traditional, owing to their differences in the methodology of the meaning of this term. The Salafists prioritise the textual rigorous Sharia meaning contained in this term. In contrast, traditional parties put forward the literal and original meaning in understanding this term.

Although the two previous studies and this research are all related to Islamic debatable terms, the two previous studies were produced from the perspective of humans (society) with various religious experiences, while this research departs from the point of view of responses from artificial intelligence (AI) models. To answer the question "How does AI respond to questions about Islamic debatable terms?", the responses generated by ChatGPT regarding these terms (*jihad* and *bid'ah* in particular) were examined. Because this artificial intelligence technology model can respond flexibly to various questions or prompts, observing the content and sentiments generated from this AI response becomes an exciting approach.

This study uses a qualitative-interpretive approach to examine how AI responds to debatable and controversial questions in Muslim societies. Through a combination of content and sentiment analysis, we attempt to analyse the responses generated from ChatGPT regarding the prompts raised regarding Arabic-Islamic terms that are still often debated: *jihad* and *bid'ah*. The aim is to determine the validity or accuracy of the generated response and whether there is a sentiment in favor of one opinion from a particular group.

The data in this study are the textual responses from ChatGPT (chat.openai.com) to a series of questions that have been asked. To achieve this, we ask two core questions (prompts), each followed by two questions to broaden the generated perspectives and references. The questions asked were as follows.

Table 1. List of prompts asked to generate ChatGPT response

Core Prompts	Follow-up Prompts
P1. Could you explain to me in detail about [*jihad*]?	P1a. Imagine yourself as a Muslim. What do you think is the value of [*jihad*] in Islam? P1b. Any reference about it?
P2. Could you explain to me in detail about [*Bid'ah*]?	P2a. As Muslims, can we do things categorised as [*Bid'ah*]? P2b. Any reference about it?

Qualitative content analysis is a research method used to analyse textual data to understand the underlying meanings and patterns within the data (Aspers & Corte, 2019; Jackson et al., 2007; Krippendorff, 2018; Kuckartz, 2019; Schreier, 2012). Meanwhile, sentiment analysis is a research method used to analyse textual data to understand the sentiment or emotion expressed in the data (Gaspar et al., 2016; Gottipati et al., 2017). Both are abstracting, identifying, coding, interpreting, and categorising the themes, concepts, and ideas presented in the data, often providing insights into human behavior, attitudes, beliefs, opinions, and experiences. Based on this brief explanation, it can be assumed that these two analyses have offended the context of identifying textual data by identifying and coding ideas generated in the text. Thus, in this case, we thematically identify (code) textual responses based on the concepts offered by ChatGPT regarding these terms and interpret them descriptively. This was done to determine the experience gained by this trained AI model so that we could examine the reference base of the resulting textual data.

Generated Response from ChatGPT about *Jihad*

To explore ChatGPT's response to the term *jihad*, we asked one core question and two follow-up questions. In the core question (P1), we asked ChatGPT to explain the concept of *jihad* in detail. After the results appear, we proceed with questions about what things are worth *jihad* in Islam (P1a), according to ChatGPT. Furthermore, we also asked what basis or reference can be used to learn more about this (P1b). The ChatGPT responses regarding questions P1, P1a, and P1b are presented in Table 2.

Table 2: ChatGPT's responses to questions about *Jihad*

P1	1	*Jihad* is an Arabic word that means "struggle" or "striving" and is commonly used to refer to a spiritual or moral struggle in the Islamic faith. However, the term has also been used to describe military action taken in defense of Islam, and this is the definition of *jihad* that is often misinterpreted and misunderstood.
	2	In Islam, *hihad* is considered to be a duty of all Muslims and is viewed as a means of striving to achieve a better self, society, and world. This can take many forms, including personal struggles to resist temptation or be kind to others, efforts to improve the community through charitable work, or activism to promote social justice and equality.
	3	However, when used in a military context, *jihad* refers to defensive warfare that is permitted only in certain circumstances, such as in cases of aggression against Muslims or to protect the freedom of religion. This type of *jihad* is regulated by strict rules of engagement and is subject to oversight by religious scholars.
	4	It's important to note that the vast majority of Muslims reject the use of violence and terrorism as a means of carrying out *jihad*. In fact, most Islamic scholars consider acts of terrorism to be a violation of Islamic law, as well as a betrayal of the peaceful nature of Islam.
	5	In conclusion, *jihad* is a term that has been widely misused and misunderstood in Western media and politics. While it can refer to military action taken in defense of Islam, this interpretation is subject to strict rules and is only permitted in certain circumstances. The true meaning of *jihad* is much broader and encompasses a range of spiritual, moral, and social struggles to achieve a better world.

P1a	1	As an AI language model, I don't have beliefs or a personal perspective, but I can provide information on the value of *jihad* in Islam based on Islamic teachings.
	2	In Islam, *jihad* is considered to be a duty of all Muslims as it represents a struggle to achieve a better self, society, and world. This struggle can take many forms, including personal struggles to resist temptation or be kind to others, efforts to improve the community through charitable work, or activism to promote social justice and equality.
	3	The Quran, the holy book of Islam, encourages Muslims to engage in *jihad*, but it also emphasises that the struggle should be done with kindness, justice, and fairness, and should not harm innocent people or violate their rights. It also mentions that the ultimate goal of *jihad* is to establish peace and harmony in society.
	4	In addition, the concept of *jihad* also includes the idea of striving against one's own ego, desires, and inner struggles in order to become a better person and come closer to God.
	5	Overall, *jihad* is a concept that is rooted in the principles of justice, fairness, and compassion, and it is viewed as a means of striving to achieve a better world through peaceful and positive efforts.
P1b	1	Certainly! The Quran is the primary source of Islamic teachings and contains many verses that discuss the concept of *jihad*. Here are a few examples:
	2	"And strive for Allah with the striving due to Him. He has chosen you and has not placed upon you in the religion any difficulty. [It is] the religion of your father, Abraham. Allah named you "Muslims" before [in former scriptures] and in this [revelation] that the Messenger may be a witness over you and you may be witnesses over the people. So establish prayer and give zakah and hold fast to Allah. He is your protector; and excellent is the protector, and excellent is the helper." (Quran 22:78)
	3	"Those who have believed and emigrated and fought in the cause of Allah with their wealth and their lives are greater in rank in the sight of Allah. And it is those who are the attainers [of success]." (Quran 9:20)
	4	"Fight in the way of Allah those who fight you but do not transgress. Indeed. Allah does not like transgressors." (Quran 2:190)

	5	"O you who have believed, be persistently standing firm for Allah, witnesses in justice, and do not let the hatred of a people prevent you from being just. Be just; that is nearer to righteousness. And fear Allah; indeed, Allah is acquainted with what you do." (Quran 5:8)
	6	These verses, and many others, demonstrate that the concept of *jihad* in Islam is multifaceted and encompasses various forms of struggle, including spiritual, moral, and physical efforts to promote justice, fairness, and compassion.

Based on the explanation generated from ChatGPT regarding P1, it can be noted that it provides a detailed and promising response in terms of content. This can be seen from the explanation regarding the concept of *jihad* itself, that is, as "a struggle or striving to achieve a better self, society, and world" (P1.1), which, according to the response, is pretty familiar among Muslims. Apart from that, ChatGPT also provides contrasting answers related to the concept of *jihad*, which is also commonly known to the vast major Muslims that this word also connotes "military action taken in defense of Islam" (P1.1). Uniquely, the ChatGPT underlines that this understanding of military action is incorrect (misused or misunderstood). Extremist groups then use this understanding to legitimise the various atrocities committed by them in the name of *jihad* (Hanafi et al., 2022; Tahir, 2017). Meanwhile, when viewed from sentiment toward a particular religious group understanding, ChatGPT does not provide impartial or one-sided arguments; in contrast, it always provides conceptual knowledge from multiple perspectives.

The general public's misunderstanding of interpreting this term did not escape the attention of ChatGPT. This can be seen from the conclusion of the response regarding P1, which indicates that the term *jihad* "has been widely misused and misunderstood in Western media and politics" (P1.5). In addition, ChatGPT emphasised that it does not reject the concept that leads to military action but still adheres to the strict rules that are "only permitted in certain circumstances." From this explanation, it can be noted that the ChatGPT can provide an alternative response that can be categorised as relatively moderate and reasonable in viewing or responding to questions about terms that are considered controversial: not taking a side with one attitude or view of a particular Muslim group.

Furthermore, ChatGPT responds to matters that are considered *jihad* in Islamic religious teachings (based on responses of P1a prompt), including (1) "personal struggles to resist temptation or be kind to others, (2) efforts to improve the community through charitable work, or (3) activism to promote social justice and equality' (P1a.2). These three teachings are in line with what was conveyed by Nurhuda (2018) that the word *jihad* contains elements of meaning to build or strive for spiritual and material things. In addition, ChatGPT also emphasised that based on the Qur'an, the struggle as a basis of values in *jihad* must be carried out with "kindness," "justice," "fairness," and "compassion" as well

as "should not be innocent people or violate their rights harm" (P1a.3). As confirmed by Ali & Sikandar (2020) and Tahir (2017) mentioned in P1a.3, *jihad* must have a primary goal "to establish peace and harmony in society."

The part that is quite surprising to researchers is that ChatGPT not only explains external struggles related to other persons but also concerns about "one's ego, desires, and inner struggles to become a better person and come closer to God" '(P1a.4), which, in general, often escapes the attention of Muslims. Thus, the resulting response indicates that ChatGPT is relatively reliable as an alternative handle. This is because the AI language model can produce a balanced explanation of the nature of AI development that is not bound by sentiment toward understanding certain groups. It is clearly stated in P1a.1 that he "does not have beliefs or a personal perspective" (P1a.1), which means that ChatGPT does not have sentiment toward the thoughts of certain groups in its responses.

In responding to questions regarding the references used in conveying its argument (P1b), ChatGPT took the primary source of Islamic reference: Al-Qur'an. We traced all the references to check their validity or correctness. The results show that all of them are valid and are included in Al- Quran. In its several verses, the Qur'an indeed discusses *jihad*, frequently. However, in several verses it does not mention this word literally (see P1b.4 and P1b.5). Even though the intention of *jihad* contained in Quran 2:190 is considered quite controversial because it uses equivalent words rooted in Q-T-L, which are oriented towards war or killing, this needs to be reviewed from the context because the verse was revealed historically so that it is not being misunderstood. Therefore, it is not surprising that when asked to provide references, this AI model immediately conveys its sources from this holy book without hesitation, saying that, "Certainly! The Quran is the primary source of Islamic teachings and contains many verses that discuss the concept of *jihad*" (P1b.1).

Generated Response from ChatGPT about *Bid'ah*

One of the Arabic-Islamic terms, whose meaning is often misunderstood, is the term *bid'ah*. Arifianto et al. (2021) state that in the Qur'an, this word is not mentioned literally, but there is only one derivative form of this word, namely badī› (the creator/innovator), which is mentioned in Quran 6:101. To explore ChatGPT›s response to this term, we asked him one core question and two follow-up prompts. In the core question (P2), we asked ChatGPT to explain the concept of *bid›ah* in detail. After the results appeared, it proceeded with questions about the permissibility of doing things categorised as *bid›ah* (P2a). We also ask what basis or reference can be used to learn more about this (P2b). The ChatGPT responses to the three questions are listed in Table 3.

Table 3: ChatGPT›s responses to questions about *bid'ah*

P2	1	Bid›ah (also spelled as bida›h or bid›a) is an Arabic term that refers to innovation or novelty in religious matters. In the Islamic context, bid›ah means introducing or inventing new religious practices, beliefs, or rituals that have no basis in the Quran or the Sunnah (the teachings and practices of the Prophet Muhammad).
	2	Bid›ah is considered a serious sin in Islam as it goes against the fundamental principle of following the divine guidance revealed in the Quran and the Sunnah. The Prophet Muhammad himself warned against bid›ah and said, «Whoever introduces something into this matter of ours (i.e., Islam) that is not from it, it will be rejected.› (Sahih Bukhari)
	3	There are two types of bid›ah in Islam Bid›ah hasanah (praiseworthy innovation): It refers to a new practice or ritual that has as beneficial effect and is not in contradiction with the Quran or the Sunnah. For example, the invention of the printing press or the use of loudspeakers for the call to prayer (Adhan) is considered bid›ah hasanah because they help spread knowledge and facilitate worship.
	4	Bid›ah dalalah (blameworthy innovation): It refers to a new practice or ritual that contradicts the teachings of Islam or has a harmful effect on the individual or society. For example, inventing a new form of worship or introducing a new Islamic sect that promotes extremism or violence is considered bid›ah dalalah.
	5	It›s important to note that the distinction between bid'ah hasanah and bid'ah dalalah is subjective and can vary depending on the interpretation of the Quran and the Sunnah by different scholars and schools of thought.
	6	In summary, *bid›ah* is the introduction of new religious practices, beliefs, or rituals that have no basis in the Quran or the Sunnah. It is considered a serious sin in Islam and is divided into two types: *bid›ah hasanah* (praiseworthy innovation) and *bid›ah say›iah* (blameworthy innovation).

P2a	1	It depends on the type of bid›ah. As I mentioned earlier, bid›ah is categorised into two types: Bid'ah hasanah (praiseworthy innovation) and bid'ah dalalah (blameworthy innovation).
	2	Bid'ah hasanah refers to innovations in Islamic practices that do not contradict the teachings of the Quran or the Sunnah. Examples of Bid'ah hasanah include building mosques, compiling Islamic knowledge into books, and using technology to disseminate Islamic teachings. These types of innovations are considered permissible in Islam and can be carried out without any issue.
	3	However, bid›ah dalalah refers to innovations in Islamic practices that contradict the teachings of the Quran or the Sunnah. Examples of bid›ah dalalah include adding or subtracting from the obligatory acts of worship, such as adding extra prayers or changing the way they are performed, or introducing new rituals or practices that have no basis in the Quran or the Sunnah. These types of innovations are considered impermissible in Islam and should be avoided.
	4	In summary, it is permissible to carry out innovations in Islamic practices that do not contradict the teachings of the Quran or the Sunnah (bid›ah hasanah). However, it is impermissible to carry out innovations in Islamic practices that contradict the teachings of the Quran or the Sunnah (Bid›ah Dalalah).
P2b	1	Sure, here are some references to support my answer: In Sahih al-Bukhari, it is narrated that the Prophet Muhammad (peace be upon him) said: «Whoever introduces a good practice in Islam, he will have its reward and the reward of those who act upon it, without decreasing their rewards. And whoever introduces a bad practice in Islam, he will bear its sin and the sin of those who act upon it, without decreasing their sins.› (Sahih al-Bukhari, Book 3, Hadith 817)

	2	In Islam, bidah is classified into two categories, bid'ah hasanah and bid›ah dalalah. Imam Shatibi, a prominent Islamic scholar, writes in his book Al-I›tisam: «Bid'ah is divided into two types: Bid'ah hasanah (good innovation) and bid'ah dalalah (bad innovation). The former is that which does not contradict any evidence from the Quran, the Sunnah, or consensus (ijma›), while the latter is that which contradicts any of these sources.› (Al-I›tisam, vol. 1, p. 38)
	3	In his book Al-Bidaya wal-Nihaya, Ibn Kathir, a renowned Islamic scholar, writes: «Bid'ah hasanah is an innovation that does not contradict the Quran, the Sunnah, or the consensus of the scholars. It is something that has been introduced to improve and enhance the religion of Islam. However, bid›ah dalalah is an innovation that goes against the Quran, the Sunnah, or the consensus of the scholars. It is something that has been introduced that is not part of the religion of Islam.› (Al-Bidaya wal-Nihaya, vol. 13, p. 267)
	4	These references show that bid›ah is classified into two types, bid'ah hasanah and bid›ah dalalah, and that the former is permissible in Islam, while the latter is not.

From this explanation, it can be seen that *bid'ah*, according to ChatGPT›s response, is conceptually defined as an "Arabic term that refers to innovation or novelty in religious matters" (P2.1). According to Musadad & Ngarfillah (2016) and Zarif et al. (2013), the word *bid'ah* is etymologically related to creativity and innovation and connotes something fresh that has not yet been seen before. Thus, this word has a broader range of meanings. It encompasses not only Islamic religious issues but also a variety of human inventions and literature. These new things include religious practices, beliefs, and various other rituals. The basis for the labeling of *bid'ah* in some of these activities is that they do not have a strong basis for the argument from both the Qur›an and the Sunnah (the teachings and decrees of the Prophet Muhammad).

According to ChatGPT, *bid'ah* is considered a form of «a serious sin in Islam" (P2.2). This is based on the hadith of the Prophet Muhammad, which reads, «Whoever introduces something into this matter of ours (i.e., Islam) that is not from it, it will be rejected." (Sahih Bukhari). This phrase was officially appropriated or embraced by Islamic doctrine and jurisprudence. As a result, the term «*bid'ah*" has come to mean a new practice in issues of religion (worship) that is at odds with what the Prophet (Muhammad) taught (exemplified) and has no foundation in Islamic Sharia (Adam et al., 2015).

Even though the previous explanation stated that practicing *bid'ah* is a sin, the unique thing about ChatGPT is that it provides an additional explanation that there are two types of *bid'ah*, namely *bid'ah hasanah* (praiseworthy innovation) and *bid'ah dalalah* (blameworthy innovation) (P2.3 & P2.4). A new custom or ritual that has positive results and

does not contradict the Quran or Sunnah is called *bid'ah hasanah*. For instance, because they aid in disseminating knowledge and facilitating devotion, the printing press and the use of loudspeakers for the call to prayer (Adhan) are examples of *bid'ah hasanah*. Meanwhile, a new custom or ritual that runs counter to Islamic principles or harms the individual or society is called *bid'ah dalalah*. For instance, creating a new religion or founding a new Islamic sect that encourages extremism or violence is considered *bid'ah* Dalalah.

However, not all Muslim groups agree on this dichotomy. This is because, in reality, some Muslim societies tend to adhere to only one mode of understanding, whether they agree with the concept of *bid'ah hasanah* or reject the term. ChatGPT also noted this difference of opinion in its response that «the distinction between *bid'ah hasanah* and bid'ah dalalah is subjective and can vary depending on the interpretation of the Quran and the Sunnah by different scholars and schools of thought' (P2.5). Arifianto et al. (2021) explain that the core of the debate lies in understanding the perspective of meaning contained in the term *bid'ah* - both epistemologically (literally) and terminologically. Disputes of views between opposing religious groups, especially between Salafi and Traditional, are happening because of their differences in perspective and the methodology of the meaning of this term. Apart from these debates, it needs to be emphasised that this explanation, which is complete and balanced and accompanied by examples, shows that ChatGPT does not lean towards understanding one particular group. Thus, ChatGPT can provide a relatively "moderate" explanation for responding to various questions about debatable concepts.

Furthermore, regarding the question about whether it is permissible to do things that are categorised as *bid'ah*, ChatGPT responded with, «It depends on the type of bid'ah (P2a.1). This AI language model does not directly punish actions that are categorised as *bid'ah*, but instead refers to the *bid'ah* dichotomy that has been described in the previous response: Bid'ah *hasanah* (praiseworthy innovation) and bid'ah dalalah (blameworthy innovation) (P2a.4). Basically, a Muslim is allowed to make innovations in the religious field as long as it is within the framework of *bid'ah hasanah* or does not violate the values contained in the Qur›an and the Sunnah of the Prophet Muhammad (Arifianto et al., 2021; Hanafi et al., 2022; Houben, 2015; Sila, 2020). As for Bid`ah which is not allowed (Bid`ah Dalalah) is in the area of 'Ibadah Mahdhah (Exclusive Worships), which does have a set of specific and binding rules (Adam et al., 2015; Syed Jaafar et al., 2018): it is not permissible to change the conditions that have been set.

When asked about references related to this discussion (P2b), ChatGPT responded by presenting several classic references which became the reference for the answers it produced, namely (1) Sahih al-Bukhari Book 3 Hadith 817, (2) Kitab al-I›tisham by Imam Syathibi vol.1 p.38, and (3) Kitab Al-Bidayah wa an-Nihayah by Ibn al-Katsir vol.13 p.267. Based on the cross-check results of some of these references, it was found that reference (1) was inaccurate because Imam Muslims narrated it, and it is found in the Book of Sahih al-Muslim, Book 34 Hadith Number 6466 (or in another version found in the Book of Sahih al-Muslim Hadith 1017). As for reference (2), there is a discussion of *bid'ah* and the distribution of its types on page 24. Even though the pages are different, ChatGPT

may provide another version (it does not explain which version is printed). Furthermore, in reference (3), there is no discussion of *bid'ah*.

As stated by ChatGPT in P2b.4, the references presented show a connection with the *bid'ah* dichotomy, namely *bid'ah hasanah* (praiseworthy innovation) and *bid'ah dalalah* (blameworthy innovation). Even though the analysis results show that ChatGPT provides a relatively moderate and balanced picture that *bid'ah* is not always related to heretical things, the references need to be re-checked. Cooper (2023) and Gravel et al. (2023) emphasise that ChatGPT sometimes provides fake references; therefore, further research is required.

Conclusion

Based on this analysis, it can be concluded that the resulting response is promising. The resulting response presentation structure includes an introduction, content, and a conclusion or summary. It is pretty easy for the user to understand the explanation presented. In addition, the language used in the elaboration is relatively easy to understand for ordinary people because it does not use academic-specific terminology that is too complicated. Furthermore, based on the content produced, it is known that when faced with controversial and debatable concepts, ChatGPT tries to find a middle ground to avoid taking sides with one particular group. ChatGPT also provided sufficient references for each of the answers it produced, although not as detailed as expected, and found several unfounded (fake) references. This implies that even though that ChatGPT could be possibly used to gain information of the Islamic religion, a wise Muslim, however, should not solely rely on ChatGPT as his reference but continue his journey to read and learn Islam from other resources and more reliably. However, this research is limited to an analysis of ChatGPT›s response to two still debated terms (*jihad* and *bid'ah*). Subsequent research can be directed to identify the level of «moderation' for generated responses from ChatGPT regarding several other Islamic religious concepts that are still considered controversial.

References

Abdullah, M., Madain, A., & Jararweh, Y. (2022). ChatGPT: Fundamentals, Applications and Social Impacts. *2022 Ninth International Conference on Social Networks Analysis, Management and Security (SNAMS)*, 1–8. https://doi.org/10.1109/SNAMS58071.2022.10062688

Adam, F., Kadir, F. K. A., Omar, S. H. S., Yusoff, Z., & Jusoh, W. H. W. (2015). Heretical Innovation of Distorted Beliefs (Bid'ah Dalalah) and Superstitious Practices Among Muslim Society in Malaysia. *Asian Social Science*, 11(24), p147. https://doi.org/10.5539/ass.v11n24p147

Ali, J. A., & Sikandar, A. (2020). *Jihad* in Violent Islamist Paradigm. *Australian Journal of*

Islamic Studies, 5(3), 97–117. https://doi.org/10.55831/ajis.v5i3.317

Arifianto, M. L. A., Hanafi, Y., & Khoirul Anam, F. (2021). Revisiting the terminology of bid'ah hasanah as a counter discourse against bid'ah dalalah in the public sphere. *Jurnal Masyarakat Dan Budaya, 23**(2). https://doi.org/10.14203/jmb.v23i2.1098

Aspers, P., & Corte, U. (2019). What is Qualitative in Qualitative Research. *Qualitative Sociology*, 42(2), 139–160. https://doi.org/10.1007/s11133-019-9413-7

Bahrini, A., Khamoshifar, M., Abbasimehr, H., Riggs, R. J., Esmaeili, M., Majdabadkohne, R. M., & Pasehvar, M. (2023). *ChatGPT: Applications, Opportunities, and Threats*. https://doi.org/10.48550/ARXIV.2304.09103

Bunt, G. R. (2018). *Hashtag Islam: How Cyber-Islamic Environments Are Transforming Religious Authority (1st ed.).* University of North Carolina Press. https://doi.org/10.5149/northcarolina/9781469643168.001.0001

Campbell, H. A., & Evolvi, G. (2020). Contextualising current digital religion research on emerging technologies. *Human Behavior and Emerging Technologies*, 2(1), 5–17. https://doi.org/10.1002/hbe2.149

Chen, K., Shao, A., Burapacheep, J., & Li, Y. (2022). *How GPT-3 responds to different publics on climate change and Black Lives Matter: A critical appraisal of equity in conversational AI*. https://doi.org/10.48550/ARXIV.2209.13627

Collins, A., & Halverson, R. (2018). *Rethinking education in the age of technology: The digital revolution and schooling in America (Second edition).* Teachers College Press, Columbia University.

Cooper, G. (2023). Examining Science Education in ChatGPT: An Exploratory Study of Generative Artificial Intelligence. *Journal of Science Education and Technology.* https://doi.org/10.1007/s10956-023-10039-y

Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., … Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642. https://doi.org/10.1016/j.ijinfomgt.2023.102642

Gaspar, R., Pedro, C., Panagiotopoulos, P., & Seibt, B. (2016). Beyond positive or negative: Qualitative sentiment analysis of social media reactions to unexpected stressful events. *Computers in Human Behavior*, 56, 179–191. https://doi.org/10.1016/j.chb.2015.11.040

Gottipati, S., Shankararaman, V., & Gan, S. (2017). A conceptual framework for analysing students' feedback. *2017 IEEE Frontiers in Education Conference (FIE)*, 1–8. https://doi.org/10.1109/FIE.2017.8190703

Gravel, J., D'Amours-Gravel, M., & Osmanlliu, E. (2023). Learning to fake it: Limited re-

sponses and fabricated references provided by ChatGPT for medical questions [Preprint]. *Health Informatics*. https://doi.org/10.1101/2023.03.16.23286914

Hanafi, Y., Arifianto, M. L., Saefi, M., Mahliatussikah, H., Anam, F. K., Hassan, A. R., & Hidayatullah, M. F. (2022). Sentiment prevalence on *Jihad* , Caliphate, and Bid'ah among Indonesian students: Focusing on moderate-radical muslim group tension. *Cogent Social Sciences*, 8(1), 2054532. https://doi.org/10.1080/23311886.2022.2054532

Houben, V. (2015). *Islam and the Perception of Islam in Contemporary Indonesia*. https://doi.org/10.11588/HDETHN.0.0.25362

Jackson, R. L., Drummond, D. K., & Camara, S. (2007). What Is Qualitative Research? *Qualitative Research Reports in Communication*, 8(1), 21–28. https://doi.org/10.1080/17459430701617879

Kitamura, F. C. (2023). ChatGPT Is Shaping the Future of Medical Writing But Still Requires Human Judgment. *Radiology*, 307(2), e230171. https://doi.org/10.1148/radiol.230171

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology* (Fourth Edition). SAGE.

Kuckartz, U. (2019). Qualitative Text Analysis: A Systematic Approach. In G. Kaiser & N. Presmeg (Eds.), *Compendium for Early Career Researchers in Mathematics Education* (pp. 181–197). Springer International Publishing. https://doi.org/10.1007/978-3-030-15636-7_8

Lund, B. D., & Wang, T. (2023). Chatting about ChatGPT: How may AI and GPT impact academia and libraries? *Library Hi Tech News*. https://doi.org/10.1108/LHTN-01-2023-0009

Luqiu, L. R., & Yang, F. (2020). Anti-muslim sentiment on social media in China and Chinese Muslims' reactions to hatred and misunderstanding. *Chinese Journal of Communication*, 13(3), 258–274. https://doi.org/10.1080/17544750.2019.1699841

Malinka, K., Perešíni, M., Firc, A., Hujňák, O., & Januš, F. (2023). *On the Educational Impact of ChatGPT: Is Artificial Intelligence Ready to Obtain a University Degree?* https://doi.org/10.48550/ARXIV.2303.11146

Moniruzzaman, M. (2008). *Jihad* and Terorism: An Alternative Explanation. *Journal of Religion*, 10. http://hdl.handle.net/10504/64361

Musadad, A. N., & Ngarfillah, I. (2016). Polemik "ahli bid'ah" dalam wacana ulūmul hadīt**:** Evaluasi Ibnu Hajar al-'Asqalāny terhadap status riwāyat al-mubtadi'. *Universum, 10**(1). https://doi.org/10.30762/universum.v10i1.219

Nurhuda, Z. (2018). Medan Makna *Jihad* dalam Perspektif Bahasa Arab dan Islam. *Buletin Al-Turas,* 24(1), 89–105. https://doi.org/10.15408/bat.v24i1.7589

Oviedo-Trespalacios, O., Peden, A. E., Cole-Hunter, T., Costantini, A., Haghani, M., Rod, J. E., Kelly, S., Torkamaan, H., Tariq, A., Newton, J. D. A., Gallagher, T., Steinert, S.,

Filtness, A., & Reniers, G. (2023). The Risks of Using ChatGPT to Obtain Common Safety-Related Information and Advice. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4346827

Oztemel, E., & Gursev, S. (2020). Literature review of Industry 4.0 and related technologies. *Journal of Intelligent Manufacturing*, 31(1), 127–182. https://doi.org/10.1007/s10845-018-1433-8

Ray, P. P. (2023). ChatGPT: A comprehensive review on background, applications, key challenges, bias, ethics, limitations and future scope. *Internet of Things and Cyber-Physical Systems*, 3, 121–154. https://doi.org/10.1016/j.iotcps.2023.04.003

Rusli, R., & Nurdin, N. (2022). Understanding Indonesia millennia Ulama online knowledge acquisition and use in daily fatwa making habits. *Education and Information Technologies,* 27(3), 4117–4140. https://doi.org/10.1007/s10639-021-10779-7

Sallam, M. (2023). ChatGPT Utility in Healthcare Education, Research, and Practice: Systematic Review on the Promising Perspectives and Valid Concerns. *Healthcare*, 11(6), 887. https://doi.org/10.3390/healthcare11060887

Schreier, M. (2012). *Qualitative content analysis in practice*. SAGE.

Shahriar, S., & Hayawi, K. (2023). *Let's have a chat! A Conversation with ChatGPT: Technology, Applications, and Limitations*. https://doi.org/10.48550/ARXIV.2302.13817

Sila, M. A. (2020). Revisiting Nu-Muhammadiyah in Indonesia: The accommodation of Islamic reformism in Bima. *Indonesia and the Malay World*, 48(142), 304–322. https://doi.org/10.1080/13639811.2020.1823150

Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). *Influences of the Industry 4.0 Revolution on the Human Capital Development and Consumer Behavior: A Systematic Review. Sustainability,* 12(10), 4035. https://doi.org/10.3390/su12104035

Solahudin, D., & Fakhruroji, M. (2019). Internet and Islamic Learning Practices in Indonesia: Social Media, Religious Populism, and Religious Authority. *Religions*, 11(1), 19. https://doi.org/10.3390/rel11010019

Syed Jaafar, S. M. J., Man, S., & Jamaludin, M. H. (2018). Bidʿah dan al-tark dalam hukum Islam: Satu penelitian awal. *Jurnal Syariah, 26*(3), 383–404. https://doi.org/10.22452/js.vol26no3.5

Tahir, U. S. (2017). The Concept of *Jihad* in Islamic Texts: An Analytical Study of Violence between Mainstream Scholars and Extremists. Al-Bayān – Journal of Qurān and Hadīth *Studies*, 15(1), 48–72. https://doi.org/10.1163/22321969-12340045

Zarif, M. M. M., Nizah, M. A. M., Ismail, A., & Mohamad, A. (2013). Creating Creative and Innovative Muslim Society: Bidʿah as an Approach. *Asian Social Science*, 9(11), P121. https://doi.org/10.5539/ass.v9n11P121